

**Notice of Allowability**

Application No.

09/726,637

Examiner

BINH K. TIEU

Applicant(s)

BEAMON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/20/2006.
2. ☒ The allowed claim(s) is/are 1-5,8,10-14 and 17-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's Representative Marisa J. Dubue (Registration No. 46,673) on March 08, 2006.

Independent claims 1, 17 and 18 in the application have been amended as follows:

**1. (Currently Amended) A method for proactively maintaining a telephone system local loop, the method comprising:**

**defining a security level of a user for accessing proactive maintenance;**

**communicating with a communication network and acquiring status information associated with a Digital Loop Carrier, the status information including engineering information relating to government regulations, and at least one of customer information, maintenance information, service information, and real-time process information;**

**predicting the proactive maintenance based upon the status information;**

**generating work order information describing the predicted proactive maintenance;**

**dispatching a common database of the work order information to the user; and**

**updating the work order information in response to new status information inputted by the user; and**

**providing historical work order information to improve the proactive maintenance.**

**17. (Currently Amended) A system for predicting proactively maintenance of a telephone system local loop, the system comprising:**

**a Dynamic Network Analyzer module communicating with a communications network and acquiring Dynamic Network Analyzer information;**

**a Loop Facilities and Control System module communicating with the communications network and acquiring Loop Facilities and Control System information;**

**a Digital Loop Carrier module communicating with a communications network and acquiring Digital Loop Carrier information identifying a Digital Loop Carrier System requiring service;**

**a database stored in memory, the database storing the acquired information, the acquired information including engineering information relating to government regulations, and at least one of customer information, maintenance information, service information, and real-time process information; and**

**a processor capable of processing information stored in the database and of generating proactive maintenance, wherein the processor provides a common database of the proactive maintenance for a user to access and use, and updates the proactive maintenance in response to user information inputted by the user; and**

**an Administrative module communicating the communications network and defining security level of the user for accessing the proactive maintenance.**

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**18. (Currently Amended) A computer-readable medium on which is encoded computer program code for proactively maintaining a telephone system, comprising:**

**computer program code for communicating with a communication network and acquiring status information associated with a Digital Loop Carrier, the status information including engineering information relating to government regulations, and at least one of customer information, maintenance information, service information, and real-time process information;**

**computer program code for predicting proactive maintenance based upon the status information;**

**computer program code for providing a common database of the proactive maintenance for a user;**

**computer program code for updating the proactive maintenance in response to new status information inputted by the user;**

**computer program code for providing historical information of the proactive maintenance by storing all the proactive maintenance; and**

**computer program code for defining a security level of a user for accessing proactive maintenance.; and**

**computer program code for providing historical work order information to improve the proactive maintenance.**

***Allowable Subject Matter***

2. Claims 1-5, 8, 10-14 and 17-25 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The amendment filed on 01/20/2006 to amend all independent claims 1, 13, 17 and 18 with the features of "...defining security level of the user for accessing the proactive maintenance" in order to respond and to overcome the combination of teachings of applied references of Kinser (US. Pat. #: 5,790,633), Kidder et al. (US Pat. #: 6,445,774) and Sardana (US Pat. #: 6,298,352) in the Office Action mailed on 10/20/2005.

The Examiner performed the updated searches and found that the new references: Hsieh et al. (US Pat. #: 6,512,824) teaches the feature of allowing a network administrator to define security levels for operators to access certain levels of a proactive maintenance such as Element Management System (EMS) (see col.7, lines 29-50). The other new reference, Storch et al. (US Pat. #: 5,920,846) teaches storing all troubleshooting problems being resolved for each of subscriber telecommunications loops into a database for future references. When a technician is dispatched to a subscriber location where a problem has been reported, such stored troubleshooting problems in the database are retrieved and to provide to the technician in order to assist him/her to quickly resolve the current problem.

Since both above Hsieh and Storch references each teaches its own features for applying into their systems, they do not clearly suggest to combine with other prior art systems such as systems of Kinser, Kidder and Sardana mentioned above. Furthermore, claims 1, 13, 17 and 18

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cannot be rejected in combination of *five* different references: Kinser, Kidder, Sardana, Hsieh and Storch. If so, the rejection is based on road map or hindsight, and should be improper.

Therefore, the claims 1-5, 8, 10-14 and 17-25 are allowed with the reasons discussed and set forth above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: [BINH.TIEU@USPTO.GOV](mailto:BINH.TIEU@USPTO.GOV).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES.**

Any response to this action should be mailed to:

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Or faxed to:

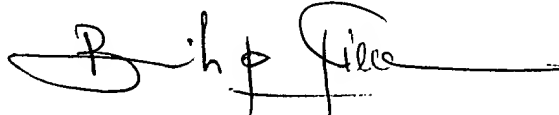
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A handwritten signature in black ink, appearing to read "Binh Tieu", with a long horizontal flourish extending to the right.

**BINH TIEU**  
**PRIMARY EXAMINER**

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Date: March 08, 2006